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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,556	11/05/2003	Yu-Chih Liu	0941-0862P	1051

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

GOMA, TAWFIK A

ART UNIT PAPER NUMBER

2627

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/700,556	Applicant(s) LIU, YU-CHIH	
	Examiner Tawfik Goma	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-4, 6-8, 10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Oh (US 6515951).

Regarding claim 1, Oh discloses a method of opening/closing a disk tray in a disk drive (fig. 3), comprising the steps of: when a first event occurs (S10, fig. 3), sending a load/unload command to the disk drive (S11, fig. 3), to which the disk drive responds with a second (Yes, S20, fig. 3) or third event (No, S20, fig. 3); and resending the load/unload command to the disk drive when the disk drive responds to the previous load/unload command with the third event (No, S20, fig. 3 and col. 3 lines 28-30).

Regarding claim 3, Oh further discloses wherein the second event returns a value for the load/unload command after a certain period of time (col. 3 lines 32-35).

Regarding claim 4, Oh further discloses wherein the third event returns a value for the load/unload command immediately (col. 3 lines 7-10). The sensor value is at High, which is ignored in the third even of Oh.

Regarding claims 6 and 7, Oh further discloses wherein the load/unload command is resent if the disk drive receives the load command previously and responds with the third event (col. 3 lines 3-11). The ejecting operation is both a load and unload operation, and the microcontroller continues to send the ejection command when it is in the third event.

Regarding claim 8, Oh discloses a method of opening/closing a disk tray in a disk drive (fig. 3), comprising the steps of: when a first event occurs, sending a load/unload command to the disk drive and receiving a value returned by the disk drive for the load/unload command (S11, fig. 3); calculating a time period from the sending of the load/unload command to the receiving of the returned value (S20, fig. 3); and resending the load/unload command when the calculated time period is shorter than a threshold (No, S20, fig. 3).

Regarding claim 10, Oh further discloses wherein the calculating of the time period comprises the steps of: recording a first clock value corresponding to the time when the load/unload command is sent; recording a second clock value corresponding to the time when the returned value is received; and obtaining the time period according to a difference between the first and second clock value (S20, fig. 3). Oh inherently discloses recording the clock values in order to properly perform the time measuring operation of S20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (US 6515951) in view of Johnston (5831613).

Regarding claims 2 and 9, Oh fails to disclose wherein the first event is clicking an eject button shown *on a screen*. Oh discloses pressing an eject button on the drive's console (fig. 2). In the same field of endeavor, Johnston discloses clicking an eject button shown on a screen (fig. 3b). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device disclosed by Oh, by allowing the user to eject from a computer screen. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to allow the user to eject from a computer screen in order to allow the computer to check if an operation is taking place and warn the user to discontinue the operation prior to ejecting (see Johnston, fig. 3c).

Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (US 6515951) in view of Applicant's Admitted Prior Art.

Regarding claims 5 and 12, Oh fails to disclose wherein the load/unload command is defined by the ATAPI CD-ROM specification SFF-8020. Applicant's Admitted Prior Art discloses using a command defined by the SFF-8020 standard (par.

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4). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the SFF-820 standard in order to provide a simple and inexpensive interface (par. 4).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (US 6515951)

Regarding claim 11, Oh fails to disclose wherein the threshold is about 0.5 seconds. Oh discloses a threshold of 1.5 seconds. Oh further discloses that the threshold is set according to the driven characteristic of the ejecting motor (col. 3 lines 11-13). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a threshold of 0.5 seconds. The rationale is as follows: to accommodate for different drive characteristics of ejecting motors in the course of optimization/experimentation a threshold of 0.5 seconds would be applied. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claim 11 is considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).


Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
8/31/2006


WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600